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news release

FISH AND WILDLIFE SERVICE Bureau of Sport Fisheries and Wildlife

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MERCURY POSING MENACE FOR MANY FORMS OF WILDLIFE

America's mercury crisis, which exploded in March with findings of high levels of this chemical in fish from Michigan's Lake St. Clair, may be even more critical for many fish-eating animals.

That is indicated by an Interior Department study of mercury levels in other wildlife of the Lake St. Clair area. A paper on findings has been prepared by Eugene H. Dustman, Lucille F. Stickel, and J. B. Elder of the Bureau of Sport Fisheries and Wildlife, in cooperation with the Michigan Department of Natural Resources.

In samples from 17 waterfowl of 4 species, 26 birds of 11 species, 7 frogs of 2 species, and 3 gartersnakes, researchers found that levels in two fish eaters, great blue herons and common terns, far exceeded those in other species. Lowest residues were in frogs, snakes, and sandpipers.

Concentrations in one of the herons reached 175 parts per million (ppm) in liver and 23 ppm in carcass; maximum residues in a tern were 39 ppm in liver and 7.5 ppm in carcass. These readings are expressed on a wet weight basis.

These residues are comparable, the authors say, to amounts of methyl mercury known to have caused death to experimental animals in Sweden, although the U.S. specimens were taken alive.

Bureau analyses were for total mercury, not the portion in methyl form. Swedish studies, however, showed almost all mercury in fish tissue is methyl mercury.

Mercury in breast muscle of ducks exceeded .5 ppm (the Food and Drug Administration's action level for fish) in four of eight mallards, in one of four blue-winged teal, and in all four lesser scaup. It exceeded 1 ppm in one bird of each species. Liver residues were higher; the maximum for each species was 5 to 6 ppm.

"Mercury residues in many of the birds at Lake St. Clair appear to be undesirably high by comparison with amounts known to be harmful," the report states. Additional surveys of mercury residues in birds are planned in different locations, including areas not now suspected of being heavily polluted by mercury.

But the mercury from Lake St. Clair, carried by waterfowl and other migratory birds, will find its way to areas far distant from the sources, the authors point out.